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# HALDIMAND COUNTY

## Report ECW-01-2021 Alternate East-West Truck Route - Road 20 (King Street) Hagersville



For Consideration by Council in Committee on February 9, 2021

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### OBJECTIVE:

To provide Council with information related to routing, feasibility and costs of alternate east-west truck routes around Hagersville.

### RECOMMENDATIONS:

1. THAT Report ECW-01-2021 Alternate East-West Truck Route - Road 20 (King Street) Hagersville be received;
2. AND THAT Army Camp Road (Road 27)/Sandusk Road be signed as an alternative truck route around Hagersville.

**Respectfully submitted:** Tyson Haedrich, M. Eng., P. Eng., General Manager of Engineering & Capital Works

**Approved:** Craig Manley, MCIP, RPP, Chief Administrative Officer

### EXECUTIVE SUMMARY:

Staff have reviewed the feasibility of an east-west truck route around Hagersville in response to a Council resolution concerned about through truck traffic traversing the downtown core of Hagersville on King Street (Road 20) and have determined that there is a feasible alternate truck route using Road 27 and Sandusk Road.

However, given the relatively low number of tractor trailer trucks currently using this route, the potential for traffic conflicts, particularly on the Sandusk Road leg, and the need for enforcement, staff are recommending that this route be signed as an alternative truck route around Hagersville rather than a forced truck route.

### BACKGROUND:

At the May 7, 2019 Council in Committee meeting, staff were given direction through the following resolution:

*“THAT staff be directed to report back to Council on the routing, feasibility and costs of alternate east-west truck routes around Hagersville.”*

This direction was initiated by concerns raised by the local community via the Ward Councillor related to the truck traffic, and in particular the larger tractor trailer traffic, passing through Hagersville on Road 20 (King Street). The east-west truck route through Hagersville using King Street passes both the hospital and the entrance to a new Empire Home subdivision currently under construction.

In 2019, through Report RDS-01-2019 Heavy Truck Route By-law, the County enacted the Heavy Truck Route By-law which regulates heavy truck routing and half-load season truck routing by identifying and signing roads within Haldimand County where heavy trucks are permitted. One of the primary goals of the by-law was to prevent heavy trucks causing damage to County roads that are not designed to carry the loads. King Street is included as a heavy truck route in the new by-law and it should be noted that trucks on local deliveries, emergency services vehicles, County vehicles and/or vehicles providing a service on behalf of the County are exempt from the by-law.

In conjunction with the Heavy Truck Route By-law, through Report ECW-07-2019 Main Street and King Street, Hagersville – No Truck Turning By-law vehicles with a length greater than 14 metres (tractor trailer trucks) were prohibited from turning at the intersection of Main Street and King Street due to space restrictions and a history of damage to County infrastructure from turning trucks as well as concern for pedestrians walking along the sidewalk.

## **ANALYSIS:**

As part of the development of this report staff completed the following activities:

- Review of potential east-west truck routes including distance, drive time, intersections, etc.
- Confirmation of ability to make trucks detour and enforcement mechanisms
- Review of required road upgrades, costing and currently scheduled capital projects
- Review of truck traffic volumes and types over time
- Discussion with MTO regarding crossing of Highway 6 at Sandusk Road
- Solicited feedback from several local trucking companies

The outcome of these activities are discussed in the following sections:

### **Feasibility**

Staff have reviewed the options for an east-west truck route around Hagersville using the existing road network. Based on this review there is only one practical truck route using Army Camp Road (Haldimand Road 27) and Sandusk Road (see Attachment 1). Other options were investigated but the routes on the north side of Hagersville do not provide an easy to follow route and would direct traffic through the Mississaugas of the Credit First Nation community and on the south side the distances become longer and the roads are surface treated as well as not being designated truck routes.

The measured distance of the Army Camp Road/Sandusk Road route is approximately 7.5 kilometres compared to the direct King Street (Road 20) distance of 5.5 kilometres. While the total distance is 2 kilometres longer the additional travel time is expected to be approximately 2 minutes due to the different driving environments and speed limits.

Both Army Camp Road and Sandusk Road are designated truck routes through the County's Heavy Truck Route By-law, however they both have reduced load limits of 5 tonnes from March 1 to April 30. This load limit reduction is based on the road's ability to carry heavy truck traffic. Based on both roads current structure they would have to be reconstructed to carry year round truck traffic.

### **Enforcement**

The County has the authority through the Municipal Act to pass by-laws with respect to highways and Section 122(7) of the Highway Traffic Act permits a municipality to pass a by-law to designate when the legal load limit of a road can be reduced. King Street is currently a heavy truck route and if trucks were to be detoured then the Heavy Truck Route By-law could be amended to prohibit heavy trucks with a registered gross vehicle weight exceeding 5 tonne from using King Street.

The by-law will be enforced by the Ontario Provincial Police (OPP) and/or the Ministry of Transportation (MTO) under the Highway Traffic Act, rather than through municipal by-law enforcement, and persons guilty of violations are subject to fines approved by the Ministry of the Attorney General and prescribed under the Provincial Offences Act.

One item to note is that while the trucks could be prohibited from using King Street through the by-law mechanism they can use any other route permitted (i.e. designated truck route) to travel to their destination.

### **Cost**

Based on a proposed east west route using Army Camp Road and Sandusk Road the required road upgrades are as follows:

#### **Army Camp Road (Road 27)**

Road 27 is currently an asphalt paved road designated as a truck route with a reduced load limit. In 2020, as part of the MTO Highway 3/6 bridge work, the County placed an overlay on the road to accommodate MTO detour. This work was funded by the MTO.

Road 27 is currently in the Tax Capital budget in 2026 with a budget of \$1.1M for reconstruction. Based on a length of 4.1 km and a cost per kilometer of \$270,000 (based on 2020 contract prices) the cost to widen and pave the road suitable for year round truck traffic is approximately \$1.1M which results in no additional costs to improve Road 27 for a year round truck detour.

#### **Sandusk Road**

Sandusk Road is currently a surface treated road designated as a truck route with a reduced load limit.

Sandusk Road is currently in the Tax Capital budget in 2025 with a budget of \$150,000 for resurfacing with tar and chip. Based on a length of 3.4 km and a cost per kilometer of \$270,000 (based on 2020 contract prices) the cost to widen and pave the road suitable for year round truck traffic is approximately \$920,000 which results in \$770,00 of increased costs to improve Sandusk Road for a year round truck route.

In summary the current costs in the tax capital budget for the proposed east west truck detour route using Army Camp Road and Sandusk Road are \$1,250,000 and would need to be increased by \$770,000 to a combined total of \$2,020,000 to fund the project.

### **Intersections and Safety Review**

Staff reviewed the Army Camp Road to Sandusk Road route for ease of use and safety considerations. Based on the review the route requires trucks to navigate seven intersections along the route as shown in Attachment 1. Of the seven intersections the three along Road 27, at Road 20, Cheapside Road and Sandusk Road are routine and should not create an issue for trucks.

The intersections along Sandusk Road are more complicated and could potentially create an issue for trucks. The major intersection is the crossing of Highway 6 at Sandusk Road and this intersection was raised as a concern by the trucking companies due to the skewed angle and speed of traffic on Highway 6. Staff have discussed this issue with the MTO and any decision to install a traffic signal is controlled by the MTO and would only be put in place if traffic warrants were met. Staff did review the similar crossing of Highway 6 at Road 55 and the traffic at the Road 55 intersection is higher than the Sandusk Road intersection and it does not meet the warrants for a traffic signal. This means for the foreseeable future this intersection will continue to be problematic for truck movement which may discourage drivers from using the alternative route.

The intersections of Sandusk Road at Concessions 12 and 13 are currently stop conditions on Sandusk Road at both intersections. These would have to be reviewed to either make the intersections an all

way stop or reverse the stop conditions to the Concession 12/13 direction in order to reduce the number of stops the trucks would have to make along the detour route.

The Sandusk Road/Road 20 intersection also has some increased risk for trucks heading westbound making the left hand turn from Sandusk Road onto Road 20 due to the skew of the intersection and traffic speed.

### **Truck Traffic Volumes**

Staff have reviewed the truck traffic counts for Hagersville as well as other communities with similar truck routes through their urban areas. The following table summarizes the results:

<b>Road (Count Year)</b>	<b>All Trucks (per day)</b>	<b>All Trucks (% total)</b>	<b>Tractor Trailers (per day)</b>	<b>Tractor Trailers (% total)</b>
Hagersville – King Street (2019)	403	8%	96	2%
Hagersville – King Street (2015)	396	8%	95	2%
Hagersville – Main Street (2016)	1,269	9%	460	4%
Jarvis – Main Street (2016)	353	5%	152	2%
Jarvis – Talbot Street (2018)	360	10%	167	5%
Dunnville – Main Street (2016)	764	9%	385	4%

Based on a review of the results the number of trucks using Road 20 (King Street) through Hagersville does not appear to have increased since 2015.

The comparison with the other communities shows that the King Street tractor trailer traffic is on the low end. The overall truck traffic is about average compared to the other communities and it is expected that that majority of this traffic is smaller trucks on deliveries.

### **Conclusion**

Based on the analysis, staff have determined that there is a feasible alternative east-west truck route around Hagersville using Road 27 and Sandusk Road instead of King Street. Staff have also determined that the timing and costs of the required upgrades to the alternate route are manageable given the projects currently in the tax capital budget.

However, restricting trucks to the alternate route only is not recommended at this time given the relatively low number of tractor trailer trucks currently using King Street, the challenges at several intersections on the Sandusk Road leg, the current reduced load postings for March and April on the route and the ongoing need for enforcement.

Instead of the mandatory truck route staff are recommending that this route be signed as an alternative truck route around Hagersville and that the truck traffic using King Street be monitored.

## **FINANCIAL/LEGAL IMPLICATIONS:**

The current costs in the tax capital budget for the proposed east west truck detour route using Army Camp Road and Sandusk Road are \$1,250,000 and would need to be increased by \$770,000 to \$2,020,000 to fund the project.

## **STAKEHOLDER IMPACTS:**

Not applicable.

## **REPORT IMPACTS:**

Agreement: No

By-law: No

Budget Amendment: No

Policy: No

## **ATTACHMENTS:**

1. Map of Hagersville East-West Truck Route